CLAIMS

1. A rotary compressor comprising:

a compression mechanism (**20**) including a cylinder (**21**) having a cylinder chamber (**C**) (**C1, C2**), a piston (**22**) accommodated in the cylinder chamber (**C**) (**C1, C2**) eccentrically with respect to the cylinder (**21**), and a blade (**23**) arranged in the cylinder chamber (**C**) (**C1, C2**) and sectioning the cylinder chamber (**C**) (**C1, C2**) into a high pressure chamber (**C-Hp**) (**C1-Hp, C2-Hp**) and a low pressure chamber (**C-Lp**) (**C1-Lp, C2-Lp**), the cylinder (**21**) and the piston (**22**) eccentrically rotating relative to each other;

a motor (**30**) for driving the compression mechanism (**20**); and

a casing (**10**) for accommodating the compression mechanism (**20**) and the motor (**30**),

wherein a low pressure space (**S1**) communicating with a suction side of the compression mechanism (**20**) and a high pressure space (**S2**) communicating with a discharge side of the compression mechanism (**20**) are formed in the casing (**10**), and

the casing (**10**) is provided with a suction pipe (**14**) connected to the low pressure space (**S1**) side of the casing (**10**) and a discharge pipe (**15**) connected to the high pressure space (**S2**) side thereof.

2. The rotary compressor of Claim 1, wherein

two spaces are formed in the casing (**10**) with the compression mechanism (**20**) interposed therebetween, one of the two spaces is the high pressure space (**S1**), and the other thereof is the low pressure space (**S2**).

3. The rotary compressor of Claim 1, wherein

the motor (**30**) is disposed in the high pressure space (**S2**).

4. The rotary compressor of Claim 1, wherein

the high pressure space (**S2**) is formed below the compression mechanism (**30**), and an oil sump (**19**) for accumulating lubrication oil is formed in the high pressure space (**S2**).

5. The rotary compressor of Claim 1, wherein

the outer peripheral face of the compression mechanism (**20**) is surrounded by the low pressure space (**S1**).

6. The rotary compressor of Claim 1, wherein

the cylinder chamber (**C1, C2**) is formed in an annular shape in section at a right angle in an axial direction, and

the piston (**22**) is formed of an annular piston (**22**) arranged in the cylinder chamber (**C1, C2**) and sectioning the cylinder chamber (**C1, C2**) into an outer cylinder chamber (**C1**) and an inner cylinder chamber (**C2**).

7. The rotary compressor of Claim 6, wherein

the blade (**23**) is formed continuously with the cylinder (**21**),

the rotary compressor further includes a coupling member (**27**) through which the annular piston (**22**) and the blade (**23**) are movably coupled to each other, and

the coupling member (**27**) includes a first sliding face (**P1**) corresponding to the annular piston (**22**) and a second sliding face (**P2**) corresponding to the blade (**23**).

8. The rotary compressor of Claim 7, wherein

the annular piston (**22**) has a shape of C obtained by cutting an annular ring,

the blade (**23**) is formed to extend from an inner peripheral wall surface of the annular cylinder chamber (**C1, C2**) to an outer peripheral wall surface thereof while being inserted through the cut part of the annular piston (**22**), and

the coupling member (**27**) is a swing bush (**27**) having an arc-shaped outer peripheral face slidably supported in the cut part of the annular piston (**22**), a blade groove (**28**) being formed therein for supporting the blade (**23**) to allow the blade (**23**) to move back and forth.

9. The rotary compressor of Claim 6 further comprising

a drive shaft (**33**) for driving the compression mechanism (**20**),

wherein the drive shaft (**33**) comprises an eccentric portion (**33a**) that is eccentric

from the rotation center, the eccentric portion (**33a**) being coupled to the cylinder (**21**) or the annular piston (**22**), and

parts of the drive shaft (**33**) located to both longitudinal sides of the eccentric portion (**33a**) are supported through the bearing portions (**16a, 17a**) in the casing (**10**).

10. The rotary compressor of Claim 1, wherein

the cylinder chamber (**C**) has a circular shape in section at a right angle in an axial direction, and

the piston (**22**) is formed of a circular piston (**22**) arranged in the cylinder chamber (**C**).